

## DIRECT SCINTILLATOR COATING FOR RADIATION DETECTOR ASSEMBLY LONGEVITY

### ABSTRACT OF THE DISCLOSURE

A radiation detector assembly, in some aspects, includes a detector substrate and a detector matrix array disposed on the detector substrate. A scintillator material is disposed on the detector matrix array and a moisture resistant layer is disposed on the scintillator material. The moisture resistant layer includes a plurality of sub-layers. The assembly also includes a protective cover disposed over the detector substrate and the moisture resistant layer, and an adhesive material disposed between the detector substrate and the cover. The adhesive material in some configurations is disposed so that it is not in contact with the moisture resistant layer.